



# inside EPA

## EPA Women Seek Fair Job Treatment

The women of EPA—and quite a few men—observed Women's Week last month with a variety of meetings and discussions, employment-ratio reports and firm resolves to make some progress before next year's observance.

Administrator William Ruckelshaus, who attended a two-hour assembly in Washington Oct. 19 opening the first Annual Conference for Women in EPA, said he was totally committed to the drive for upgrading the status of women in the Agency, for expanding their representation in higher-grade positions, and for equitable salaries and treatment.

He noted, however, several obstacles, including the fact that EPA's higher-grade positions are predominantly in engineering and the physical sciences for which he said relatively few women are trained.

Ruckelshaus also made a videotape for Women's Week that was presented at assemblies in Cincinnati, Ohio; Durham, N.C.; and Montgomery, Ala. In other EPA installations across the country, similar meetings were held under the leadership of women's program coordinators organized by the Office of Civil Rights and Urban Affairs.

Women want to be "considered as human beings, as individuals" rather than stereotypes facing an "invisible wall of resistance against recognition of what we really are and what we have the right to become," said Ms. Charlie K. Swift, head of the Women's Programs Division, who planned and presided over the Washington meeting.

Ms. Swift acknowledged that women are "biologically different," but she said, "I hope never to hear again 'Vive la difference!'"

"What is wrong is the assumption that the traditional woman's role is enough for all women, that this satisfies all their needs, and that in the profoundly changing world, the contributions of their minds and talents and skills are not of equal importance to society."

Other speakers at the meeting included Carol M. Thomas, director of the Office of Civil Rights and Urban Affairs; Judy Kaufman, staff assistant to the President; Anita Perlman, national chairman of the B'nai B'rith Commission on Youth; and James C. Spry, executive assistant

to the Civil Service Commission.

The meeting opened with music by the Marine Band and presentation of the colors by a Marine Corps color guard. The session closed with an interpretive dance by a group of women students from Gallaudet College.

The morning assembly was followed by small-group discussions, which continued through the following day, on "Job Statistics and Counseling," "Hiring and Recruiting Women," "Women in Leadership Roles," and "Career Development Programs for Women." Panelists included Allie Latimer Weeden, General Services Administration; Barbara McKee, Atomic

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—photo by Ernest Bucci  
First Annual Conference on "Women in EPA," held Oct. 19 in the GSA hall, highlighted the Washington staff's observance of Women's Week.

# Scuba Divers Work in Water Pollution

By John S. Farlow

*Edison, N.J., Water Quality  
Research Laboratory*

Much has been written about the romance of scuba diving, and who has not watched Jacques Cousteau's colorful TV documentaries of marine wonders? Yet how many people know that the gear worn by a diver weighs about 135 pounds in air? How many know that within the EPA a small group has been diving to perform some of the dirty and strenuous tasks associated with water pollution abatement work?

As far back as the early 1960s it was recognized by those in Region V's Great Lakes—Illinois River Basins Project that their measurement of water currents in the Great Lakes could not be efficiently carried forward unless divers' services were available. From this beginning a combination of in-house and commercial divers have been used for a whole variety of tasks.

In Lake Michigan, Frank McGowan (now with the Corps of Engineers), Roscoe Libby, and I were the first Public Health Service scuba divers. Early in the Lake Michigan water current study some of the large marker buoys began to come adrift. Diver inspection of the remainder soon revealed that wave action caused the 40-pound counterweights attached to the buoy bridle 10 feet below the water surface to wear out critical cotter pins, whose loss permitted the buoy line fastenings to come apart. Once the problem was defined, a solution was easily found to prevent further loss of the \$15,000 instrument clusters.

A number of the "lost" current-meter stations, (i.e., stations whose surface buoys had come adrift) were recovered through the combined efforts of USPHS and commercial divers and the "sea scanner," a high frequency sonar. The sonar was used to locate the current-meter string (suspended between an anchor and a subsurface buoy) to within about a 75-foot radius, and



—photo by Jack Farlow

**Wet-suited scuba diver prepares to work on bottom of Boston Harbor, checking current meter stations and other underwater equipment.**

a marker buoy was anchored. Divers descended the marker buoy line to the bottom and swept a hundred foot radius by swimming the outer end of a piece of parachute cord in a circle about the marker buoy anchor. If the marker had been anchored in the correct place, the cord would wrap around the buoy line. Visibility averaged about eight feet, which prevented visual searches. Having that cord hit the missing instrument string produced feelings similar to winning the Irish sweepstakes!

Scuba divers were also used to evaluate the influence of wind on the surface marker of a submerged current cross. The latter device was used to measure diffusion to estimate the "dilution of pollution," and it was important that wind effects be minimal. Divers released small amounts of dye near the cross and observed the motion of the cross relative to the dye, which was influenced only by water motion. These observations confirmed the calculations for equipment used in Great Lakes studies involving the simultaneous use of three vessels and an airplane.

In EPA Region I scuba divers Carl Eidam, Pete Nolan, Joe Di-Cola, and I carried out a program

of current meter observations in Boston Harbor in 1969 and 1970. Divers attached marker lines between the current meter station anchors and the anchors of nearby Coast Guard buoys. Divers later scrubbed and scraped marine growth off moving parts of the current meters and helped retrieve the meters at the close of the project.

In Region II Pete Douglas (now with the National Marine Fisheries Service) and I set and retrieved biological substrate samplers at a national water quality network station in the Delaware River, cut fouled lines from the propellers of various EPA vessels and dug a stubborn anchor out of the bottom of Raritan Bay. In addition, a scuba diver was employed to wash a temperature recorder out of the bottom of Barnegat Bay with a water jet one windy February day. Various biologic benthic (ocean bottom) surveys have also been made.

This brief sampling lists only a few of the jobs that scuba divers have been doing to further the cause of water pollution abatement. Other divers in other regions have been performing equally valuable tasks under similarly difficult conditions. Ask around; there are probably some working near you!

# 16 Awarded EPA Scholarships

Sixteen sons and daughters of EPA employees have been awarded scholarships totalling \$5,550 for college study this year.

Checks for the scholarships, in varying amounts up to \$500, are being individually presented to the winners by the senior EPA officials at the laboratories or offices nearest their homes.

The EPA Scholarship Fund comes primarily from honoraria and fees offered to agency officials for speeches and magazine articles. Federal regulations forbid the acceptance of such payments when an official is speaking or writing as an EPA representative, but voluntary charitable contributions may be received instead of such fees. The Fund also receives individual gifts, mainly from agency officials, and the Internal Revenue Service has ruled that such gifts are tax deductible, according to Robert F. McDONALD, Fund manager.

Scholarship applicants must be children of career employees having at least three years of service, and must be full-time students at an accredited college or junior college. Children of deceased or disabled employees are also eligible.

The scholarships are renewable, depending upon the student's academic performance and the availability of funds.

The winners, their parents, and colleges are as follows:

**NERC—Research Triangle Park, N.C.**—Susan Margolin, 18, a sophomore at the University of North Carolina, Chapel Hill, daughter of the late Emanuel D. Margolin, supervising chemical engineer, Office of Air Programs.

**NERC—Cincinnati, Ohio**—Martha Piepmeyer, 20, sophomore at the University of Cincinnati, daughter of Mrs. Virginia R. Piepmeyer, personnel clerk.

Mary L. Wilson, 35, who is starting her studies for a degree at the University of Cincinnati, daughter of Ward Fleshman, Sr., chemist in

the Odor Control Systems Division at NERC-RTP.

Susan M. Kamphake, 17, and Thomas F. Kamphake, 18, freshmen, and Jeffery L. Kamphake, 19, sophomore, all at the University of Cincinnati; their father is Lawrence J. Kamphake, research chemist at the Taft Water Research Division.

**NERC—Las Vegas, Nev.**—Barbara E. Rizzardi, 17, who will start at the University of Nevada, Las Vegas, in January; she is the daughter of Charles J. Rizzardi, technical writer-editor.

Nina Dee Suter, 20, freshman at the University of Nevada, daughter of Mrs. Martha Lindsay, switchboard operator.

**Region IV EPA Office, Atlanta, Ga.**—Mary Jo Reid, 21, senior at Georgia Southern College, Statesboro, daughter of Mrs. Hannah J. Reid, secretary, Office of Economic Analysis.

**Indiana District Office, Evansville, Ind.**—Philip Regalbuto, 20, sophomore at the University of Wyoming, Laramie, son of Constantino J. Regalbuto, chemist.

**Eastern Environmental Radiation Laboratory, Montgomery, Ala.**—Aleice F. Belser, 19, sophomore at Alabama State University, Montgomery, daughter of Charles J. Belser, biological laboratory technician.

**Chamblee Toxicology Laboratory, Chamblee, Ga.**—Susan Parks,

18, freshman at DeKalb Community College, Clarkston, Ga., daughter of Mrs. Christine E. Parks, clerk-stenographer.

**Region VII EPA Office, Kansas City, Mo.**—Mary Jo Poskin, 18, freshman at the University of Missouri, Columbia, daughter of Joseph D. Poskin, inspector in pesticides regulation.

**Northwestern Water Laboratory, Gig Harbor, Wash.**—Regina Anthony, 18, freshman at Green River Community College, Tacoma, daughter of Nathaniel C. Anthony, laboratory technician.

**Region IX EPA Office, San Francisco, Calif.**—Linda L. Massie, 17, freshman at the College of San Mateo, daughter of Mrs. Shirley J. Massie, administrative assistant.

**Wheeling Field Office, Wheeling, W. Va.**—James Bradac, 20, sophomore at Ohio State University, Columbus, Ohio, son of Charles J. Bradac, chemist.

Applications for next year's scholarship awards may be made any time before June 30. Application forms are obtainable at any EPA personnel office.

Fund trustees include Deputy Administrator Robert W. Fri; Assistant Administrators Thomas E. Carroll and John R. Quarles Jr.; James Barnes, special assistant to the administrator, and Mr. McDONALD.

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## Symposium Discusses Water Environment

More than 125 persons attended a two-day symposium on "The Aquatic Environment" at the Water Programs Office in Arlington, Va., last month.

The conferees, about evenly divided between EPA and university scientists, discussed the latest research on the role of water-borne bacteria in the cycling of such nutrients as nitrogen, carbon, phosphorus, and sulfur; the modeling of

aquatic ecosystems; and implications for water quality management.

Among the EPA participants and panelists were R. K. Ballentine, R. C. Gentry, Dr. Leonard J. Guarraia, Lowell E. Keup, Kenneth Mackenthum, and Robert L. Sansom, all of EPA's Washington headquarters; and Dr. Donald Lear of Region III.

Proceedings of the symposium will be published.

# Remedial Work Starts On 'Hot' Mine Tailings

The recent agreement between the Federal Government and the State of Colorado to take joint action to protect the residents of Grand Junction, Colo., from radioactive mine tailings marks a new phase of EPA's work on this environmental radiation problem.

The Agency's responsibility is expected to shift from helping delineate the problem to assisting in monitoring progress in two- to three-year program of remedial action.

The action program is based on a series of EPA studies, made in cooperation with the Atomic Energy Commission and the Colorado State Health Department, to measure the extent of the hazard and to test various protection techniques.

The tailings are a sand-like waste material from uranium mining. Long before anyone realized they might be dangerous, the tailings were used as fill material under homes and other buildings and as a handy substitute for sand in concrete.

Hundreds of buildings in Grand Junction were involved: homes, schools, stores and offices. Uranium tailings were also used in other mining communities in Colorado and other western states, but not on the scale of Grand Junction.

Then scientists found that the tailings were still emitting low levels of radiation and small amounts of radon, a radioactive gas. No case of illness from this radiation has been positively identified, but in some of the Grand Junction buildings the radiation levels have exceeded the purposely conservative Federal guidelines, and state health officials are concerned about the possibility of cumulative, long-term effects.

EPA grants and technical assistance in delineating the problem have amounted to about \$600,000, according to Paul Smith, chief of the

Programs Support Branch in the EPA Region VIII office in Denver.

The remedial work to start this fall will include actual removal of tailings, application of sealant coatings and shielding material, and improved ventilation systems. The methods will vary according to the types of structures and the local levels of radiation. About 1,500 structures will be involved, one state official said. Buildings with the most radiation will be worked on first.

Congress has authorized \$5 million as the Federal Government's share, at a 75-25 split with the State. This could bring the total cost to \$6.7 million. The AEC is the Federal agency in charge.

Whether and to what extent EPA radiation experts will be involved has not yet been determined. Charles Weaver of the Office of Radiation Programs in Washington is EPA's representative on the Federal State Advisory Board established by the AEC under the contract.

## EPA SEWER AID TOPS \$1.3 BILLION

In the first 19 months of EPA's existence, the Agency disbursed \$1.3 billion to help States and cities build sewage treatment facilities.

This figure was announced last month to summarize the largest budget category in EPA's pollution control programs.

Waste water treatment has been the object of Federal aid since the passage of the Water Pollution Control Act of 1956. Amendments since then have broadened the incentives and benefits. Communities in every State are now employing EPA's construction grants to build new sewer systems and upgrade existing ones.

The \$1.3 billion includes all new grants from December, 1970, when the Agency was established, through June, 1972. During this period an additional \$571 million was awarded for projects begun under the Federal Water Quality Administration, an EPA predecessor agency.

The grants ranged from \$1,310 for Grapeland, Texas, to \$33 million for Detroit. The average amount was just under \$640,000.

## Lab Dedicated at Kansas City

More than 300 persons attended the dedication of Region VII's new laboratory in Kansas City, Kan., Oct. 25.

Rep. Larry Winn Jr., congressman from the third district of Kansas, and Administrator William Ruckelshaus were the principal speakers. Ruckelshaus said the new facility exemplified EPA's research function, often overlooked by the public in its concern over enforcement of environmental laws.

The one-story building containing 25,000 square feet of working space combines scattered laboratory operations formerly carried out at the University of Kansas Medical Center, the Olathe Naval Air Base,

and a waste treatment plant in Jackson County, Missouri.

Actual operations at the new building started last summer for a 30-man staff of biologists, bacteriologists, chemists, and engineers under Garry Fisk, head of surveillance and analysis for Region VII.

The lab equipment includes a gas chromatograph mass spectrometer for very precise detection and measurement of pollutant substances, and an electronic computer for rapid and accurate data handling.

Storage is provided for the Region's truck-mounted mobile field laboratory and several boats used in obtaining water samples from rivers and lakes.



# First Annual Conference on 'Women in EPA'



Speakers included, from left, Charlie K. Swift, Carol M. Thomas, and White House aide Judy Kaufman.

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Energy Commission; Barbara Jones, Civil Service Commission; Priscilla Ranshoff, Department of Defense; and Jean Lightfoot, Kate Stahl, Howard Messner, Albert Dimcoff, Ruth Mondschein, Marie Wilson, Stanley R. Williams, and Harvey Wiener, all of EPA.

A new publication, "Women in EPA," was issued shortly before the Women's Week observance and served as an information resource for many of the discussions. It gives statistics on the employment of women in the Agency by type of position and grade. Data are given for all EPA employees as of June, 1971, and for all regional employees as of March, 1972.



photos by Ernest Bucci

Gallaudet College dancers ended the conference with an original ballet.

## Many Agencies Involved in Environmental Study

Environmental protection can benefit from the knowledge and skills of dozens of Federal agencies beside EPA, as well as from a variety of national research laboratories, computer facilities, and other "centers of excellence" in science and technology.

This was the theme that dominated a three-day interagency conference held in Livermore, Calif., last month under the sponsorship of EPA and the Atomic Energy Commission.

A dozen EPA scientists described the Agency's current research and monitoring efforts, with emphasis on the cutting edge of unsolved problems: better modeling of ecosystems, better instrumentation, and means for storing and using large quantities of complex data.

The modeling of ecosystems—duplicating in the laboratory or on a computer the changes that take place in living systems as their environment changes—is a very useful tool, said Dr. A. F. Bartsch, in a

paper co-authored by Dr. Norbert A. Jaworski, both of EPA's NERC-Corvallis. But no single "master model" is likely to meet the needs of all users, even if one could be constructed, he said.

EPA speakers included Stanley M. Greenfield, Peter Johnson, Delbert S. Barth, A. W. Breidenbach, William N. Fitch, Warren B. Johnson, Ronald A. Venezia, George Morgan, Alphonse F. Forziati, John D. Koutsandreas, George F. Wirth, and James R. Hammerle.

# Strip Mines Serve Double Purpose

Strip-mined land with its open trenches and piles of "spoil" material often can be used as landfill sites, serving a dual purpose of safe, attractive solid waste disposal and reclamation of the gutted land.

An EPA-sponsored demonstration of this technique at Frostburg, in western Maryland, has attracted wide attention from city planners and engineers, according to Leonard Lion of the National Environmental Research Center at Cincinnati, EPA engineer for the project.

Visitors have come from South America, Europe, and many States to inspect the Frostburg project. Charles Kenealy, chief of the State's Division of Solid Waste Control, said the State had held three conducted tours of the area and issued an illustrated brochure about it.

Waste from two cities, Cumberland and Frostburg, with a combined population of 50,000, and half a dozen industrial plants are handled at the site, which is operated by Allegany County.

Since the project began five years ago, aided by a grant from EPA's predecessor agency in the Public Health Service, another strip-mine site near Westernport, Md., has been opened to serve six smaller communities in Allegany and Garrett Counties, Maryland, and Mineral County, West Virginia.

These landfills replace scores of scattered, burning dumps, Lion said, including 33 in the two Maryland counties alone. Nearly half of these dumps have been permanently closed, and the remaining ones are being phased out.

The demonstration site has been supported for five years by grants totalling \$293,000 from EPA and its forerunner agencies. The State, the County, and the two cities contributed \$207,000. Total costs of the landfill, including capital investment, operation, and maintenance, average \$1.45 per ton of waste, compared to the range for non-mine sites of \$1.50 to \$4 per ton. An av-



—photo by Don Moran

**Old strip mine near Frostburg, Md., a model landfill for five years, has attracted visitors from many States and foreign countries.**

erage of 270 tons per day is deposited in the Frostburg trench, compacted, and covered with earth from the adjoining spoil pile.

EPA's interest in strip-mine landfills involves many other factors than efficient waste disposal and land reclamation. The Agency has performed and supported research at Frostburg, and at smaller sites in the area, to determine how such landfills affect ground and surface water supplies and whether acidic water from old mines can be filtered by landfills.

Advantages of strip-mine sites for landfills, Lion pointed out, include:

- No initial excavation required; the trench or pit is already there.
- Cover material close at hand.
- Access roads already constructed.
- Low costs for leasing or buying the land.

The United States has close to five million acres of strip-mined land, according to Ernest P. Hall, chief of EPA's Mining Research Section. Not all of this acreage is from coal mining; many other minerals are mined by surface methods, includ-

ing sand and gravel, limestone, phosphates, copper, and zinc. Old strip-mine sites are close to many communities in most parts of the country and within short rail-haul distance from such large cities as Chicago, Philadelphia, and New York, where nearby landfill sites are getting scarce.

The Frostburg demonstration site is expected to take about 20 years to fill up, but Allegany County should have little trouble finding another. Western Maryland and adjoining parts of West Virginia are scarred by thousands of abandoned mines.

**Inside EPA, published monthly for all employees of the U.S. Environmental Protection Agency, welcomes contributed articles, photos, and letters of general interest.**

**Such contributions will be printed and credited, but they may be edited to fit space limits.**

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## BANK ROBBERS CUT TELEPHONES TO EPA OFFICES

An attempted bank robbery in Arlington, Va., last month cut off telephone service to EPA's water programs people in the Crystal Mall complex for nearly a week.

The bandits entered an underground vault and severed all the cables in sight, presumably to cripple the bank's protection systems and enable them to enter the bank's inner office posing as telephone repairmen.

The cables contained 15,000 telephone lines to the high-rise office and commercial center, including 600 lines serving EPA.

Agency officials rented a room in a motel across the street, where the phones were still working, and set up emergency radio links to the phoneless building. Walkie-talkie sets were used to relay messages to and from the water programs offices and the outside world. Outgoing calls were made from the rented room or from the motel's pay-phone booths, which were in continual use.

Using borrowed equipment, a special radio-telephone link was established between the Crystal Mall office of Louis DeCamp, acting director of Water Programs Operations, and Robert Sansom, assistant administrator for Air and Water Programs, across the Potomac in Washington.

The cables were cut at 10 o'clock on a Wednesday morning. By Monday, service had been restored in 60 to 70 percent of the EPA offices, according to William Elder, communications officer.

The bandits fled without any money after shooting and killing the bank manager and a policeman. Four days later, men answering their descriptions hijacked an airliner in Houston, Texas, and escaped to Cuba after killing an airline employee.

## Two EPA Oil-Spill Workers Injured in Helicopter Crash

Two EPA men were seriously injured last month while working to contain and clean up an oil spill in southern Utah.

They are John Cunningham, 26, of the Oil and Hazardous Materials Division in Washington, and Michael Streiby, 27, of the Region VIII office in Denver. Both were passengers in a helicopter that crashed near Kayenta, Ariz., on the evening of Oct. 18.

Cunningham suffered fractures of the legs and extensive back injuries, with possible nerve damage, and was reported in serious condition. Streiby suffered a broken ankle, facial cuts, and other injuries. Both are hospitalized in Albuquerque, N.M.

The pilot of the Army Ranger helicopter and a Coastguardman passenger were also injured, but less seriously. They were discharged after several days in the hospital, according to Kenneth Biglane, director of the Oil and Hazardous Mate-

rials Division. Biglane said Cunningham was in surgery for seven hours on Oct. 24.

The men had been working on an oil spill in the San Juan River valley in the Glen Canyon Recreation Area of southern Utah, resulting from a pipeline break near Shiprock, N.M. More than 120,000 gallons of crude oil poured down the valley and into Lake Powell, an impoundment of the Colorado River. Emergency teams from many government agencies were working to contain the spill.

Before the crash, the men were plucked by the helicopter from their working posts—Cunningham at the boom site and Streiby from a mountain top where he was acting as a radioman—and carried to the Monument Valley air strip, Biglane reported. The crash occurred after the pilot took off again to make room for another aircraft coming in for a landing. The men had stayed in the helicopter because of the darkness and pouring rain.

## Auto Use Curbs Studied

EPA-supported studies now under way in 16 cities will help State and local officials determine how to reduce air pollution from vehicles by "alternative control strategies."

Such measures include various schemes to reduce the use of cars and trucks in congested urban areas, where emission controls on the vehicles are expected to be insufficient to achieve the national air quality standards by 1975.

The studies will consider such alternative strategies as parking bans and other traffic controls, staggered working hours, encouragement of car pools, mass transit systems, and vehicle inspection systems in relation to each particular city.

Under the Clean Air Act of 1970, each State last January submitted

to EPA a plan to implement the national air quality standards. States with urban traffic problems were given additional time, until Feb. 15, 1973, to come up with the technical details and time schedules for the alternative strategy portions of their plans.

Two consulting engineering firms are performing the studies under EPA contracts: TRW, Inc., McLean, Va., for \$166,360; and GCA Corporation, Bedford, Mass., for \$201,000.

Cities being studied by TRW are: Dayton, Denver, Houston/Galveston, Los Angeles, New York, Philadelphia, and Phoenix; by GCA: Boston, Baltimore, Minneapolis/St. Paul, Pittsburgh, Salt Lake City, Spokane, and Seattle.

# 74 Labs Are Closed as Fire Hazards

More than one third of the laboratory operations in EPA's big new building at Research Triangle Park, N.C., were closed down for safety reasons last month by Dr. John F. Finklea, director.

All "high-hazard" operations—chiefly those involving volatile gases and chemicals—were halted in 74 of the building's 200 laboratories following a month-long, inch-by-inch inspection launched by Finklea when he took over as director in September. Previous safety checks, both by EPA officials and outside experts, had indicated serious deficiencies in the building, which has been in use for about a year.

Center officials are looking for other, nearby space in which to house the displaced operations, Deputy Director Jack Thompson estimated in might take two months before all of them can be resumed. Meanwhile, work will continue on the affected projects' non-laboratory phases: collation of data, report writing, and experimental planning.

The \$10.5-million, 300,000-square-foot building is leased by the Federal government from a private owner at an annual rent of \$1.175 million. Some of its fire hazards were noted in a study made last spring: lack of fire walls in some laboratories, single exits in others,

sealde windows, unprotected ceiling beams that could buckle under intense heat, and interconnected fume ducts that could spread a fire rapidly from one lab to another.

Corrective measures were initiated immediately after the closing order, and about 50 separate projects are completed or underway.

The building was designed for the National Air Pollution Control Administration before EPA was established in December, 1970, and without knowledge that EPA's expanded air pollution research would involve many high-risk operations.

Finklea listed three main difficulties with the building:

- Location away from fire fighting services.
- The Agency's need for "certain analytical research procedures not suitable for this facility."

- "Piecemeal consolidation" at Research Triangle Park of research projects that have increased the fire hazard.

Plans had already been made, Finklea said, to move most of these operations next June. However, the inspection revealed such imminent danger that the shutdown was ordered immediately, before new space could be found or the necessary building alterations made.

Moving the high-risk operations six months before the planned June date, will entail only "marginal additional cost" to the Government, Finklea said.

Pressurized cylinders of hydrogen, acetylene, and other gases have been moved out of the building, as have storage drums of volatile chemicals.

Burton Levy, director of administration, said the decision to limit use of the building to low-risk projects was deliberate, "based on our own analysis of what the building could tolerate and not prompted by an accident."

"There have been no personal injuries or damage here because of explosions or fire," he said.

## Typhoon Olga Halts Work On Island Radiation Survey

A typhoon in the Pacific Ocean last month interrupted the work of five EPA radiation specialists on Eniwetok atoll.

The men from the National Environmental Research Center at Las Vegas, Nev., were among more than 100 persons from many Federal agencies and their contractors laying the groundwork for the possible return of the native population, evacuated 25 years ago so the remote island could be used for nuclear weapons testing.

The NERC team—Charles F. Costa, William E. Moore, James R. Martin, Dwayne Rozell, and Jack E. Thrall—had been making a radiological survey of the main atoll and about 40 nearby islands, testing soils and structures and taking environmental samples to help determine what cleanup work should be done. They were working for the Atomic Energy Commission, in cooperation with specialists from AEC's Lawrence Livermore Laboratory and the University of Washington.

The team had been on Eniwetok for about 10 days when Typhoon Olga—15th in this year's series of

Pacific tropical storms—approached the island. On the evening of Oct. 23 all were evacuated in an Air Force cargo plane and taken to Kwajalein atoll, about 400 miles away.

Olga struck the next day, putting the island's power plant out of commission. The survey had to be postponed, and the five left Kwajalein the next day.

The EPA team expects to return early in January to complete the survey, and Costa is looking forward to it. "It's very hard work there," he said, "lugging all that heavy equipment . . . and hacking through the jungle. The climate's very hot and humid. A couple of the guys came down with heat prostration. But it's beautiful, the islands and the lagoons."

The Eniwetok natives also want to return, and the Federal government hopes the island can be made habitable by the end of next year.

The return of the natives is a joint project of the AEC, the Department of Defense, and the Department of the Interior, which administers the Pacific Trust Territories.